



*Aging and Disability  
Services  
Advisory Council  
April 16, 2004*

# **PEARLS**

***Program to Encourage Active, Rewarding Lives for Seniors***

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Emblem by artist Martin Oliver. It is a Northwest Coast Indian symbol of physical and mental well-being.



# **PEARLS**

## **Community Partners**

- Aging & Disability Services
- Senior Services of Seattle/King County
- The Seattle Mayor's Council for African American Elders
- Seattle Grandparent's Reparenting Group



# PEARLS Goals

- To develop a community-based depression treatment program for older adults.
- To develop a case-finding system
- Use this system to recruit and randomize participants, comparing the treatment program with usual care.



# PEARLS Hypothesis

12 months after initiating the program, participants receiving the PEARLS intervention would have greater improvements in depression and quality of life as compared to the usual care group.

We also examined the effect of the intervention on healthcare utilization.



# DSM-IV

## Depressive Symptoms

1. Depressed mood
2. Loss of interest and pleasure
3. Change in sleep
4. Change in appetite / weight
5. Low energy / fatigue
6. Psychomotor agitation / slowing
7. Poor concentration
8. Low self-esteem or guilt
9. Thoughts of suicide or death



# Late Life Depression

- Clinically significant depression affects 15-20% of older individuals in the U.S.
- Late life depression is associated with:
  - lower physical functioning
  - poorer adaptation to medical illness
  - lower quality of life
  - higher health care utilization and costs
  - non-adherence to medical treatments
  - increased mortality from suicide and medical illness



# Late Life Depression

- Few older adults with depression are recognized as depressed and few receive adequate treatment.
- Older adults with poor physical health and functional limitations are at risk for greater chronicity of depression and worsening of their health-related quality of life and functional limitations.
- Rates of depression are higher in older adults who:
  - are socially isolated
  - have high medical comorbidity
  - are homebound
  - have functional impairment



# Why Study Minor Depression?

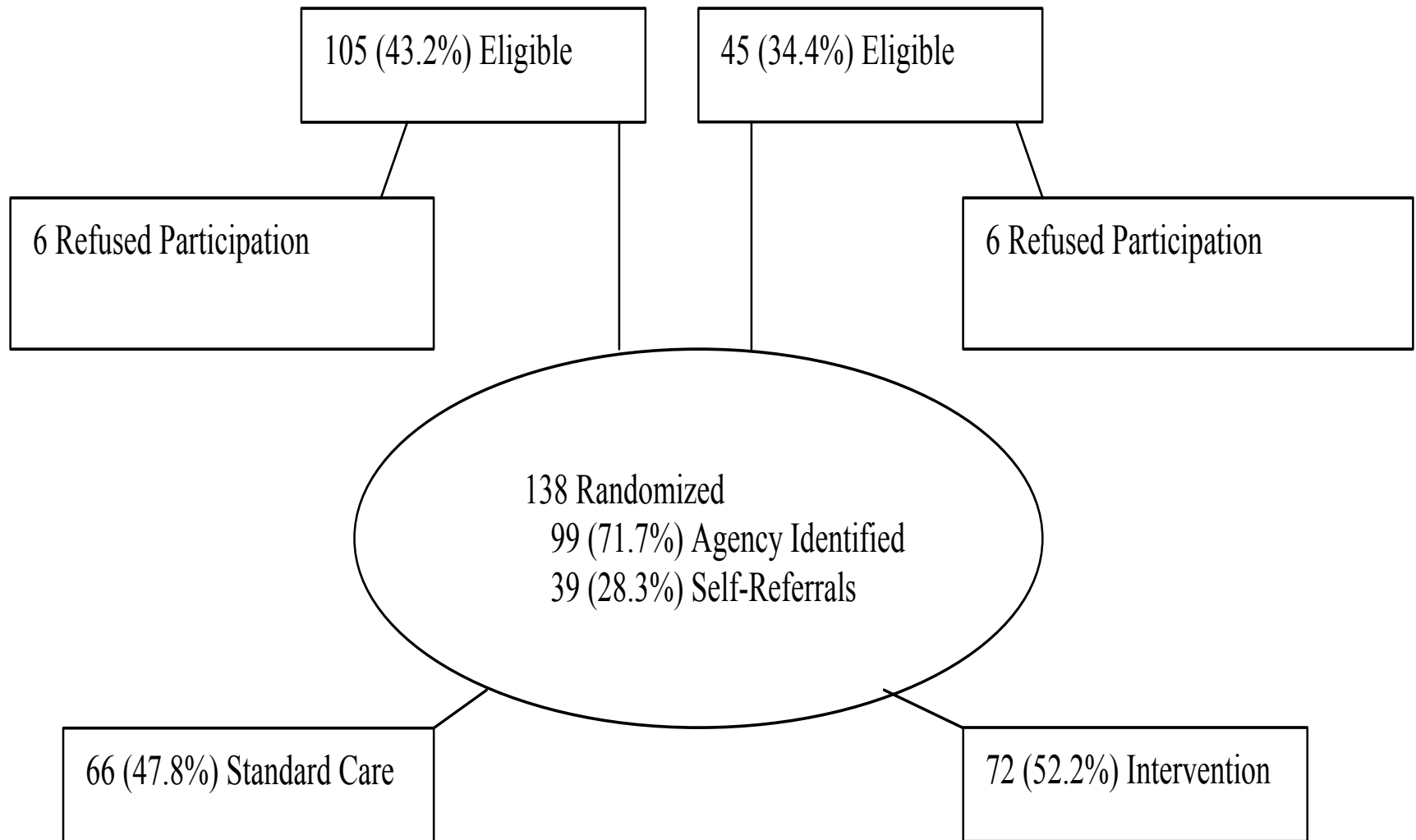
- In community settings, older individuals are less likely than younger adults to have major depression, but they have comparable or higher rates of both dysthymia and minor depression.
- There is limited evidence on effective treatments for minor depression among older adults.
- Hypothesis that minor depression can be successfully treated by CBO social work staff members.





# PEARLS Inclusion/ Exclusion Criteria

- Age 60+
- Diagnosis of minor depression or dysthymic disorder
- Receiving services from Senior Services or Aging & Disability Services or living in public housing
- Exclusion criteria: major depression and other psychiatric disorders (e.g., bipolar disorder and psychotic disorder), substance abuse, cognitive disorder





# PEARLS Intervention

- Symptoms/Indicators of Depression
- Problem-solving treatment
- Social and physical activation
- Pleasant events scheduling
- Clinical supervision by a psychiatrist
- If necessary, recommendations for medication management via phone contact with physician and/or patient
- Follow-up phone calls (1/month, for 6 months)
- Conducted in the home of subjects
- Eight sessions over 19 week period



# DSM-IV

## Depressive Symptoms

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# Problem Solving Treatment

- PST counselor helps participant understand the link between problems in life and symptoms of depression.
- If problems are dealt with effectively, symptoms decrease.
- PST is a skill building method.
- PST helps to define and clarify problems.
- PST provides a structured, realistic, and achievable approach to solve problems.



# Problem Solving Treatment

Why is PST appropriate for this population?

- 1) It gives clients a clear outline for solving problems/making decisions that are related to their depression.
- 2) It is not psychotherapy “psychiatric tx.”
- 3) It is consistent with modern self-management support strategies used in treating chronic medical illness.
- 4) It can be administered by line-staff professionals



# Problem Solving Treatment

## **7 STEPS:**

1. Define and break down a problem
  - State the problem in a clear, concrete form
  - Break down large problems into smaller, more manageable parts
2. Establish realistic goals for problem resolution
3. By brainstorming, generate multiple solution alternatives
4. Implement decision making guidelines (assess pros and cons)
5. Evaluate and choose a solution
6. Implement the preferred solution (as “homework”)
7. Evaluate the outcomes (at the following session)



# Problem Solving Treatment

**Example:** “Since my knee replacement I’m unable to use the stairs to the front door w/o much pain

**Goal:** To go up/down with minimal pain

To go out of the house 4 times per week

## **Solution Options:**

- 1) Do stretch exercises taught in PT before using stairs
- 2) Go out the back door then down the front stairs
- 3) More willingly ask children to help up/down
- 4) Take a pain pill before I go out

Evaluate advantages/disadvantages to solutions,  
Select a solution, map out an action plan to implement





# Physical Activation

- Assist clients in developing a regular physical activity program
- Activities are consistent with participant's physical ability and preferences.
- PEARLS counselors encourage the selection of group activities, such as those found at senior centers.
- The goal is to achieve national recommendations for moderate activity: 30 min. per day, 5 days per week



# Social Activation

- Assist clients in developing a program of social and recreational activities outside the home
- As needed, participants use a resource list to develop a plan for increasing social interactions.
- Participants are encouraged to use existing community resources, such as senior centers, community centers, and faith communities.



# Pleasant Events Scheduling

- There is evidence that participation in pleasant events reduces depressive symptoms.
- Pleasant activities don't necessarily involve other people or going places
- At each session, the participant selects a pleasant activity to do as "homework."
- If a participant could not determine a pleasant activity, a 250-item idea-generating list was offered to assist.



# MD Supervision

A Psychiatrist oversees the intervention through:

- biweekly case review with interventionists
- assessment of medical problems
- as needed, contact with providers regarding potential medical or substance abuse etiologies for depression
- as needed, contact with providers regarding initiating or changing antidepressant medications.

Recommendation for a change in medication was based on PHQ-9 scores  $>50\%$  of baseline scores ***and*** continuing or recurring cardinal symptoms.



# Baseline Demographics

	<b>Usual Care</b> (n=66)	<b>Intervention</b> (n=77)	<b>Total</b> (n=138)
Female	50 (76%)	59 (82%)	109 (79%)
Average age	73.5	72.6	73.0
Living Alone	43 (65%)	56 (78%)	99 (72%)
Married or Living with Partner	7 (11%)	8 (11%)	15 (11%)
Ethnic Minority	28 (43%)	30 (42%)	58 (42%)
Annual Household income <\$10,000	33 (51%)	45 (64%)	78 (58%)



# Baseline Clinical Characteristics

	<b>Usual Care</b> (n=66)	<b>Intervention</b> (n=77)	<b>Total</b> (n=138)
Average Depression Score	1.2	1.3	1.3
No. of Chronic Conditions	4.6	4.5	4.6
Receiving Treatment for Depression	16 (24%)	24 (33%)	40 (29%)
Hospitalizations in past 6 months	19 (29%)	20 (28%)	39 (28%)
ER visits in the past 6 months	25 (38%)	29 (40%)	54 (39%)



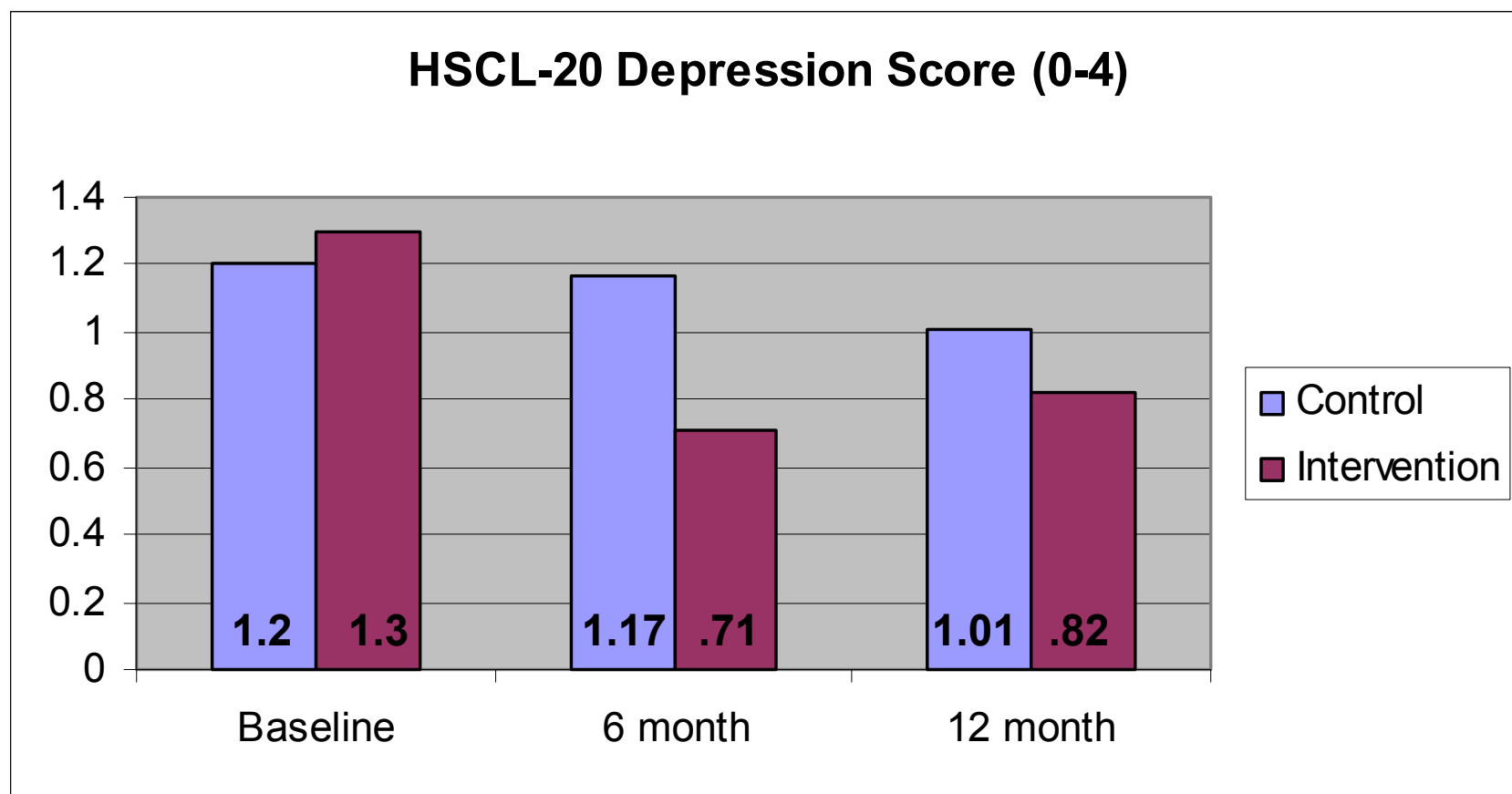
# Process Outcomes

Intervention participants received:

- A mean of **6 in-person visits** (3 had no visits)
- A mean of **3.5 follow-up phone contacts** (23 participants received no follow-up phone contacts).



# Depression Outcomes

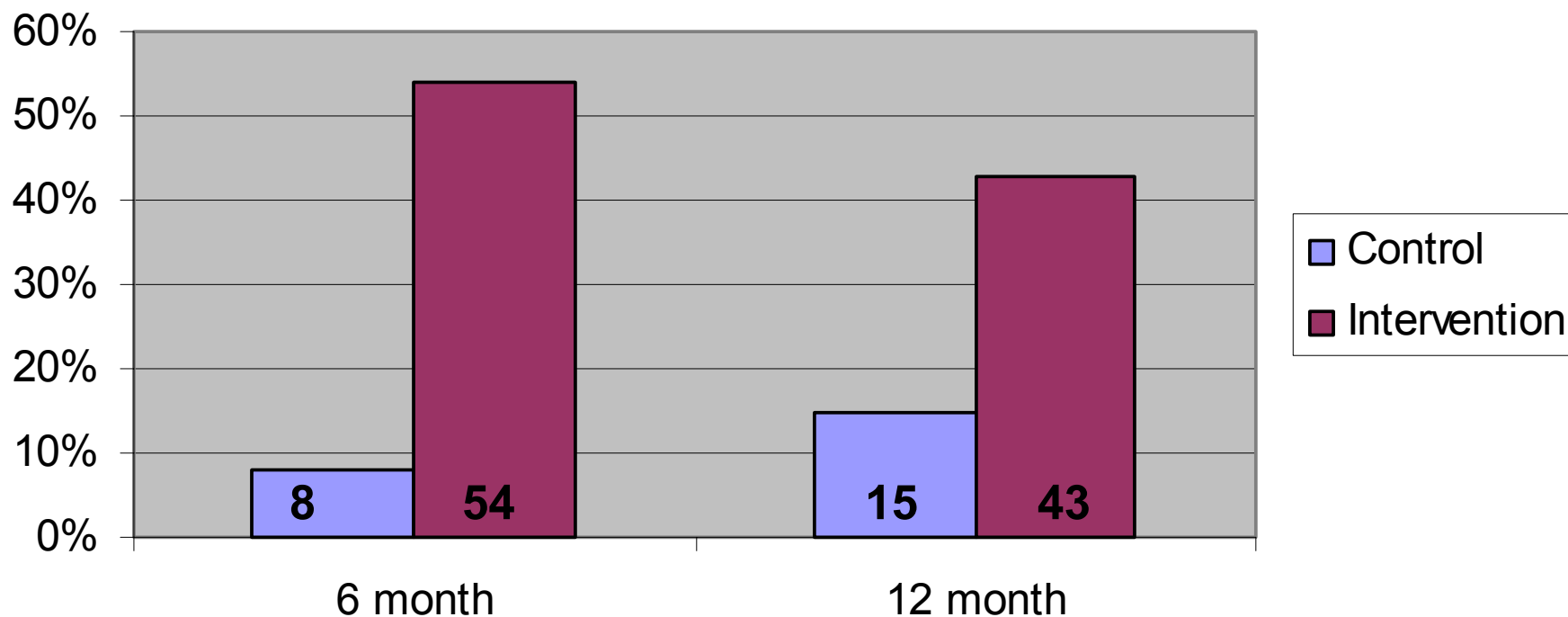






# Depression Outcomes

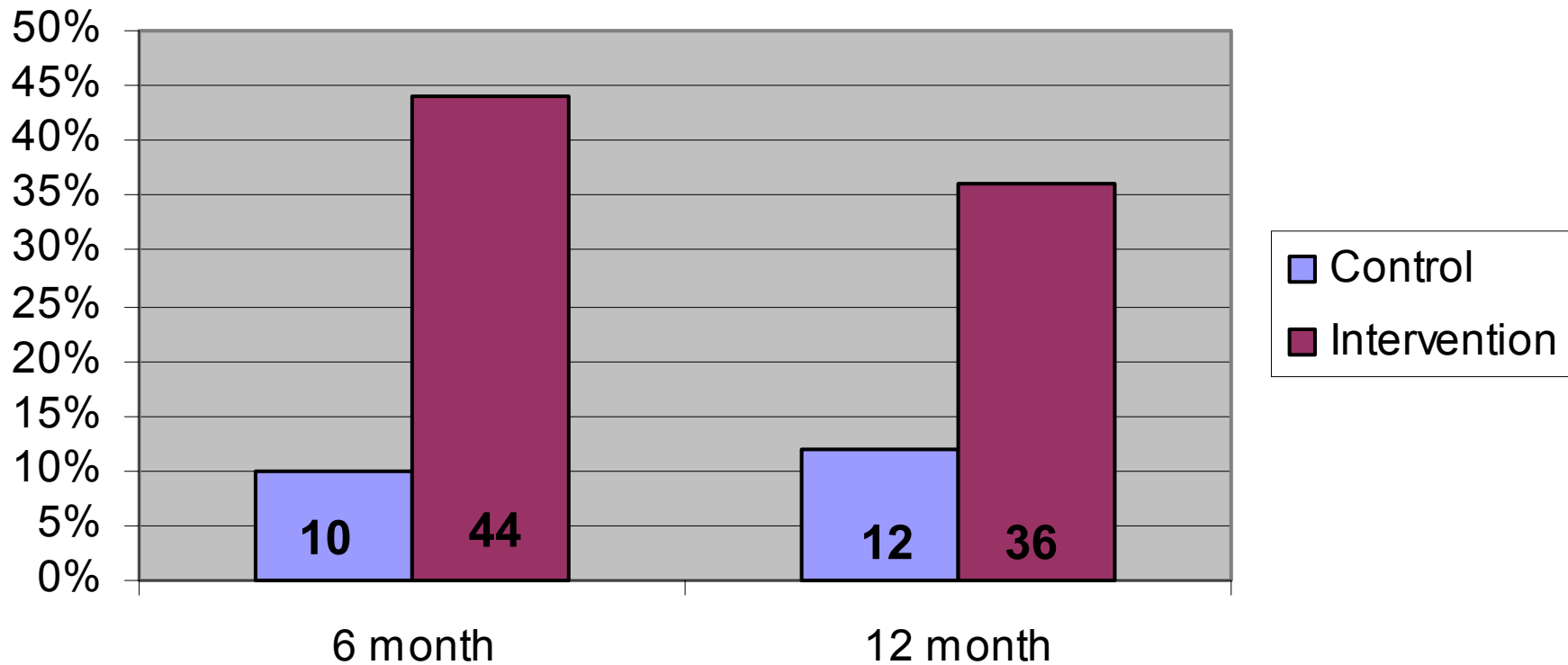
## 50% Decrease in HSCL-20





# Depression Outcomes

## Complete Remission of Depression





# Quality of Life

There was significant improvement in quality of life areas related to **functional well-being** and **emotional well-being**.



# Limitations

- The study sample size was relatively small and limited to one urban geographical area, limiting generalizability.
- We did not have access to automated health care records, and instead relied on self-reported health care utilization.



# Conclusions

The PEARLS intervention resulted in lower severity and greater remission of depression among intervention participants as compared to usual care.



# Conclusions

By partnering with community agencies, it is possible to **case-find** and effectively **treat** depressed, frail older adults using primarily non-pharmacological treatments, such as Problem Solving Treatment, coupled with physical and social activation and pleasant events scheduling.



# Conclusions

Dissemination of the PEARLS program within existing community social service programs has the potential to significantly improve the well-being and function of depressed older adults served by these programs.

## Recent Publication

P. Ciechanowski, E. Wagner, K. Schmaling, S. Schwartz, B. Williams, P. Diehr, J. Kulzer, S. Gray, C. Collier, J. LoGerfo.

Community-Integrated Home-Based Depression Treatment in the Elderly: A Randomized Controlled Trial.

*Journal of the American Medical Association,*  
April 7, 2004.

